

### **Amendments to the Claims**

1. **(Previously Presented)** A method for polishing an object by using an abrading surface made of abrasive particles and a binder, said method comprising:

polishing the object by the abrading surface while supplying a liquid not containing any abrasive particles for a determined time period; and

further polishing the object by the abrading surface while supplying abrasive particles so as to perform additional removal of a surface material to remove a specific film thickness.

2. **(Previously Presented)** A method according to claim 1, wherein said further polishing to remove the surface material is performed with the abrading surface by supplying a slurry containing abrasive particles to the abrading surface.

3. **(Previously Presented)** A method according to claim 1, wherein said further polishing to remove the surface material comprises:

polishing while concurrently dressing the abrading surface with a liquid not containing abrasive particles to thereby generate free abrasive particles therefrom.

4. **(Cancelled)**

5. **(Previously Presented)** A polishing apparatus for polishing a surface of an object, said polishing apparatus comprising:

a holder for holding the object;

an abrading surface comprising abrasive particles and a binder;

a mechanism for pressing the surface of the object to said abrading surface while producing a sliding motion over a polishing interface;

a device for supplying a liquid not containing abrasive particles to the polishing interface; and

a surface material removal device for performing additional material removal by supplying abrasive particles on said abrading surface, said surface material removal device being integrally mounted in said polishing apparatus.

6. **(Previously Presented)** A polishing apparatus according to claim 5, wherein said surface material removal device is a device for supplying a slurry containing abrasive particles to the polishing interface.

7. **(Previously Presented)** A polishing apparatus according to claim 5, wherein said surface material removal device is a device for dressing said abrading surface so as to release abrasive particles from said abrading surface.

8. **(Previously Presented)** A polishing apparatus according to claim 5, further comprising:  
first polishing means for polishing while supplying a liquid not containing abrasive particles to the polishing interface; and

second polishing means for polishing while supplying a slurry containing abrasive particles to the polishing interface.

#### Claims 9-53 **(Cancelled)**

54. **(Currently Amended)** A method for polishing an object using an abrading surface made of abrasive particles and a binder binding the abrasive particles, said method comprising:

dressing the abrading surface to shape the abrading surface by a dresser prior to a polishing process;

pressing the object against the abrading surface; and

polishing the object by making a sliding motion between a surface of the object and the abrading surface, wherein

said dressing process comprises removing residual particles from the dressed abrading surface,  
and

said removing process comprises washing the abrading surface using a brush while flowing a liquid thereon.

55. **(Previously Presented)** A method according to claim 54, wherein a surface roughness of the abrading surface is less than  $\pm 30\mu\text{m}$  after said dressing process.

56. **(Previously Presented)** A method according to claim 54, wherein the abrading surface is a surface of an abrading plate, the abrading plate being shaped by pressing while in a container during a manufacturing process of the abrading plate.

57. **(Previously Presented)** A method according to claim 54, wherein a ratio of the abrasive particles and a material of the binder is 1:x, where x is not less than 0.5 by volume (the binder material per 1 unit of the abrasive particles is not less than 0.5 unit), and proportions of the abrasive particles, the binder, and porosity are, respectively, not less than 10%, not more than 60% and 10-40% by volume.

58. **(Original)** A method according to claim 54, wherein said dressing process is conducted under supplying water.

59. **(Previously Presented)** A method according to claim 54, wherein the dresser comprises diamond particles.

60. **(Previously Presented)** A method according to claim 59, wherein the dresser comprises the diamond particles electro-deposited in a nickel base.

Claims 61-64 **(Cancelled)**

65. **(Currently Amended)** A method ~~according to claim 61~~ for polishing an object using an abrading surface made of abrasive particles and a binder binding the abrasive particles, said method comprising:

dressing the abrading surface to shape the abrading surface by a dresser prior to a polishing process;

pressing the object against the abrading surface; and

polishing the object by making a sliding motion between a surface of the object and the abrading surface, wherein

said dressing process comprises removing residual particles from the dressed abrading surface, and

said removing process comprises applying a pressured fluid on the abrading surface.

66. **(Previously Presented)** A method according to claim 65, wherein a pressure of the pressured fluid is less than 5 kgPa.

67. **(Currently Amended)** A method ~~according to claim 61~~ for polishing an object using an abrading surface made of abrasive particles and a binder binding the abrasive particles, said method comprising:

dressing the abrading surface to shape the abrading surface by a dresser prior to a polishing process;

pressing the object against the abrading surface; and

polishing the object by making a sliding motion between a surface of the object and the abrading surface, wherein

said dressing process comprises removing residual particles from the dressed abrading surface, and

said removing process comprises applying an ultrasonic fluid on the abrading surface.

Claims 68-73 **(Cancelled)**

74. **(Currently Amended)** A method for polishing an object using an abrading surface made of abrasive particles and a binder binding the abrasive particles, said method comprising:

polishing a surface of the object by pressing the object against the abrading surface and making a sliding motion between the surface of the object and the abrading surface; and

dressing the abrading surface by a dresser for roughening the abrading surface during said polishing process to generate free abrasive particles from the abrading surface,

wherein said polishing process comprises conducting a first stage polishing without dressing, and conducting a second stage polishing with dressing.

75. **(Cancelled)**

76. **(Previously Presented)** A method according to claim 74, wherein said polishing process is conducted while supplying a liquid not containing abrasive particles.

Claims 77-81 **(Cancelled)**

82. **(Currently Amended)** An apparatus for polishing an object using an abrading surface made of abrasive particles and a binder binding the abrasive particles, said apparatus comprising:

a holder for holding the object;

a mechanism for pressing the object against the abrading surface and making a sliding motion between a surface of the object and the abrading surface; ~~and~~

a dresser for dressing the abrading surface prior to a polishing process to shape the abrading surface; and

a residual particles removing device for removing residual particles from the dressed abrading surface.

wherein said residual particles removing device comprises a brush for washing the abrading surface while flowing a liquid thereon.

83. **(Previously Presented)** An apparatus according to claim 82, wherein a surface roughness of the abrading surface is less than  $\pm 30\mu\text{m}$  after the dressing process.

84. **(Previously Presented)** An apparatus according to claim 82, wherein the abrading surface is a surface of an abrading plate, the abrading plate being shaped by pressing while in a container ~~in~~ during a manufacturing process of the abrading plate.

85. **(Previously Presented)** An apparatus according to claim 84, wherein a ratio of the abrasive particles and the binder material is 1:x, where x is not less than 0.5 by volume (the binder material per 1 unit of the abrasive particles is not less than 0.5 unit), and proportions of the abrasive particles, the binder, and porosity are, respectively, not less than 10%, not more than 60% and 10-40% by volume.

86. **(Previously Presented)** An apparatus according to claim 82, further comprising a device for supplying water during the dressing process.

87. **(Original)** An apparatus according to claim 82, wherein said dresser comprises diamond particles.

88. **(Previously Presented)** An apparatus according to claim 87, wherein said dresser comprises said diamond particles electro-deposited in a nickel base.

Claim 89-92 **(Cancelled)**

93. **(Currently Amended)** An apparatus according to claim 89 for polishing an object using an abrading surface made of abrasive particles and a binder binding the abrasive particles, said apparatus comprising:

a holder for holding the object;

a mechanism for pressing the object against the abrading surface and making a sliding motion between a surface of the object and the abrading surface;

a dresser for dressing the abrading surface prior to a polishing process to shape the abrading surface; and

a residual particles removing device for removing residual particles from the dressed abrading surface,

wherein said residual particles removing device comprises a pressured fluid ejector for applying a pressured fluid on the abrading surface.

94. **(Previously Presented)** An apparatus according to claim 93, wherein a pressure of the pressurized fluid is less than 5 kgPa.

95. **(Currently Amended)** ~~An apparatus according to claim 89~~ for polishing an object using an abrading surface made of abrasive particles and a binder binding the abrasive particles, said apparatus comprising:

a holder for holding the object;

a mechanism for pressing the object against the abrading surface and making a sliding motion between a surface of the object and the abrading surface;

a dresser for dressing the abrading surface prior to a polishing process to shape the abrading surface; and

a residual particles removing device for removing residual particles from the dressed abrading surface,

wherein said residual particle removing device comprises an ultrasonic source for applying an ultrasonic energy to a fluid on the abrading surface.

Claims 96-98 **(Cancelled)**

99. **(Currently Amended)** An apparatus for polishing an object using an abrading surface made of abrasive particles and a binder binding the abrasive particles, said apparatus comprising:  
a holder for holding the object;  
a mechanism for polishing a surface of the object by pressing the object against the abrading surface and making a sliding motion between a surface of the object and the abrading surface;  
a dresser for dressing the abrading surface for roughening the abrading surface during the polishing process to generate free abrasive particles from the abrading surface; and  
a controller for sending a signal for switching between a first stage polishing which is conducted without dressing, and a second stage polishing which is conducted with dressing.

100. **(Cancelled)**

101. **(Previously Presented)** An apparatus according to claim 99, wherein the polishing process is conducted while supplying a liquid not containing abrasive particles.

102. **(Previously Presented)** A method according to claim 1, wherein the object is a semiconductor wafer having a raised and depressed pattern thereon.

103. **(Previously Presented)** A method according to claim 1, wherein the object is held by a same holder during said polishing and said further polishing.

104. **(Original)** An apparatus according to claim 5, wherein said abrading surface comprises a surface of an abrading plate.

105. **(Previously Presented)** A method according to claim 74, wherein the dresser comprises a diamond dresser.

106. **(Previously Presented)** An apparatus according to claim 99, wherein the dresser comprises a diamond dresser.